## IOWA DEPARTMENT OF TRANSPORTATION

To Office Bridges and Structures Date July 1, 2011

Attention All Employees Ref No. 521.1

From Gary Novey

Office Bridges and Structures

Subject Revision of Standards 1005, 1005A, 1006, 1006A, 1006B, 1006C, 1006D, 1006E, 1007,

1007A, 1007B, and 1007C.

(CADD M0206)

Electronic copies are available in the following Office of Bridges and Structures standard directory **W:\Highway\Bridge\Standards\Bridges** and on the Internet:

## http://www.iowadot.gov/bridge/standard.htm

This is the revision of the berm slope protection and subdrain standards 1005, 1005A, 1006, 1006A, 1006B, 1006C, 1006D, 1006E, 1007, 1007A, 1007B, and 1007C. The choice of outlet details for water crossings is based on the necessary berm slope protection determined by the design high water surface elevation and the velocity of the water under the bridge.

Standard 1005 – The labeling of the berm slope which is identified as 'Grading Surface' was placed on the PROFILE VIEW's. Due to berm grading guidelines the berm slopes outside of the bridge were changed to begin sloping at the outside of the Wing Armoring corner at the end of the bridge wing.

Standard 1005A - The labeling of the berm slope which is identified as 'Grading Surface' was placed on the PROFILE VIEW's. Due to berm grading guidelines the berm slopes outside of the bridge were changed to begin sloping at the outside of the Wing Armoring corner at the end of the bridge wing. The material for the Wing Armoring was changed to Erosion Stone and a length from the slope edge of the bridge berm to the top of revetment material was added to the PROFILE VIEW's.

Standards 1006, 1006A, & 1006B - The labeling of the berm slope which is identified as 'Grading Surface' was placed on the SECTION A-A details.

Standards 1006C, 1006D, & 1006E - The labeling of the berm slope which is identified as 'Grading Surface' was placed on the SECTION A-A details.

Standards 1007, 1007A, & 1007B - The labeling of the berm slope which is identified as 'Grading Surface' was placed on the SECTION B-B details.

Standard 1007C – The OUTLET DETAILS were revised and there are now 5 options which can be used for the berm slope protection. The choices are Erosion Stone, Embedded Revetment Stone, and Revetment Stone (Non-Embedded). See standard for details of choices which are outside of border sheet.

Note: If the berm slope protection is different at each abutment, two (2) standard sheets shall be provided in the plans to identify the berm slope conditions at each abutment.

For any questions, please check with Stuart Nielsen or Thayne Sorenson.

GAN/ssn